



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,462	08/30/2006	Xiaopin Duan	0310707US	8176
97291 7590 07/21/2010 Huawei Technologies Co., Ltd. IPR Dept., Building B1-3-A, Huawei Industrial Base, Bantian Shenzhen Guangdong, 518129 CHINA				
EXAMINER				
BAIG, ADNAN				
ART UNIT		PAPER NUMBER		
2461				
NOTIFICATION DATE		DELIVERY MODE		
07/21/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatent@huawei.com
fwashington@huawei.com

Office Action Summary

Application No.

10/562,462

Applicant(s)

DUAN, XIAOQIN

Examiner

ADNAN BAIG

Art Unit

2461

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 6, and 16-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6, and 16-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Vanttinen US (2001/0009857) in view of Hinni et al. US (2007/0011226).

Regarding Claim 1, Vanttinen discloses a handing method for providing a client with a location estimate of a target User Equipment (UE), the method comprising the steps of: sending to the client (see Fig. 4, LCS client), from a LCS (location service) system (see Fig. 3 step 302 & Fig. 1D, CN), a location Information message (see Fig. 4 INF message 428) carrying the location estimate of the target UE, (see Fig. 4 where LCS client receives message 428 (i.e., location information message) of subscriber terminal MS location (i.e., target UE) from GMLC. The GMLC received the location

information message 418 through SGSN. See Para [0063] i.e., location service & [0067-0069] i.e., client receives location information)

and after receiving the Location Information message, the client, attempting to process the location estimate of the target UE, **(see Para [0069] lines 1-4 e.g., once client is informed, it must attempted to process message 428)**

While Vanttinen discloses the outside client is able to process the location estimate, Vanttinen does not expressly disclose the client sending to the LCS system a Location Information Acknowledgement message wherein (a) if the client is unable to process the location estimate of the target UE, the Location Information Acknowledgement message includes a cause of failure, and (b) if the client is able to process the location estimate of the target UE, the Location Information Acknowledgement message includes an indication that the location estimate of the target UE has been processed successfully. However the limitation of steps a-b would be rendered obvious in view of the teachings of Hinni et al. US (2007/0011226).

Referring to Fig. 2D, Hinni illustrates whether selected task handler 255 **(e.g., client)** is able to perform a processing job according to a request originated by a client 250, **(see Para [0018])**

the task handler 255 sending to the process handler an Information Acknowledgement message wherein (a) if the task handler is unable to process the service request information of the client 250, the Location Information Acknowledgement message includes a cause of failure, **(see Fig. 2D State message 272 (e.g., ACK) & Para [0085] & [0048] lines 5-17 e.g., indications of the processing performed or not performed, partial or final results, error descriptors (e.g., cause of failure))**

(Referring to Fig. 5C, the steps for a selected task handler 155 are illustrated where in step 586 the resultant state information (e.g., completed state, partially completed state, errors and/or other indications) sent to the requesting process handler, **see Para [0106]**)

b) if the task handler 255 is able to process the service request information of the client 250, the Information Acknowledgement message includes an indication that the processing job of the client 250 has been processed successfully, **(see Para [0048] & [0085])**

(Hinni suggests new mechanisms for computing are desired, especially those which may provide a reliable computing framework and platform, **see Para [0017]**)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention for the client as disclosed in Vanttinen to send an Information Acknowledgement message to the LCS system by implementing the teachings of Vanttinen who discloses when receiving the Location Information message including the location estimate of the target UE from the LCS system, the client, attempting to process the location estimate of the target UE, within the teachings of Hinni who discloses a task handler sending an information Acknowledgement message in response to the completion of a processing job requested by a client where the limitations of steps a-b are performed to inform the client of the final result of the processing, because the teaching lies in Hinni that new mechanisms for computing are desired, especially those which may provide a reliable computing framework and platform.

Regarding Claim 2, the combination of Vanttinen in view of Hinni disclose a method according to Claim 1, further comprising before the sending a Location Information message to the client, **(Vanttinen, see Fig. 4, location message 428 to LCS client & Para [0067-0069])**

Regarding Claim 3, the combination of Vanttinen in view of Hinni discloses a method according to claim 2, further comprising:

after receiving the Location Information Acknowledgement by the LCS system, sending to the requestor an LCS Location Response (**Hinni, see Fig. 2D Completion State Message 277 & Para [0085]**)

Regarding Claim 4, the combination of Vantinen in view of Hinni discloses a method according to Claim 3, wherein the sending to the requestor an LCS Location Response includes:

a Subscriber Location Report Acknowledgment wherein if the Location Information Acknowledgement message includes the cause of failure, the Subscriber Location Report Acknowledgment includes the cause of failure, and if the Location Information Acknowledgement message includes the indication that the location estimate of the target UE has been processed successfully, the Subscriber Location Report Acknowledgment includes the indication that the location estimate of the target UE has been processed successfully, (**Hinni, see Fig. 4 steps 276-277 & Para [0085],[0048]**)

after receiving the Subscriber Location Report Acknowledgment, sending to the requestor an LCS Location Response wherein if the Subscriber Location Report Acknowledgment includes the cause of failure, the LCS Location Response includes the cause of failure, and if the Subscriber Location Report Acknowledgment includes the indication that the location estimate of the target UE has been processed successfully, the LCS Location Response includes the indication that the location estimate of the

target UE has been processed successfully, (Hinni, see Fig. 4 steps 276-277 & Para [0085],[0048])

Regarding Claim 6, the combination of Vanttinen in view of Hinni discloses a method according to claim 1, further comprising, prior to sending to the LCS system a Location Information Acknowledgement sending a Subscriber Location Report Acknowledgement, (Vanttinen, see Fig. 4 Ack 420 & Para [0067])

Regarding Claim 16, the combination of Vanttinen in view of Hinni discloses a method according to claim 1, wherein the indication that the location estimate of the target UE has been processed successfully comprises: a flag of successful handling or an absence of an processing status parameter, (Hinni, see Para [0048])

Regarding Claim 17, Vanttinen discloses a method of processing location information of a target User Equipment (UE), comprising the steps of:

receiving at a client (see Fig. 4, LCS client) a Location Information message (see Fig. 4 INF message 428) including a location estimate of a target UE, (see Fig. 4 where LCS client receives message 428 (i.e., location information message) of subscriber terminal MS location (i.e., target UE) from GMLC. The GMLC received the location information message 418 through SGSN. See Para [0063] i.e., location service & [0067-0069] i.e., client receives location information)

after receiving the Location Information message, the client attempting to process the location estimate of the target UE, **(see Para [0069] lines 1-4 e.g., once client is informed, it must attempted to process message 428)**

While Vanttinen discloses the outside client is able to process the location estimate, Vanttinen does not expressly disclose the client generating a Location Information Acknowledgement message wherein (a) if the client is unable to process the location estimate of the target UE, the Location Information Acknowledgement message includes a cause of failure, and (b) if the client is able to process the location estimate of the target UE, the Location Information Acknowledgement message includes an indication that the location estimate of the target UE has been processed successfully. However the limitation of steps a-b would be rendered obvious in view of the teachings of Hinni et al. US (2007/0011226).

Referring to Fig. 2D, Hinni illustrates whether selected task handler 255 **(e.g., client)** is able to perform a processing job according to a request originated by a client 250, **(see Para [0018])**

the task handler 255 sending to the process handler an Information Acknowledgement message wherein (a) if the task handler is unable to process the service request information of the client 250, the Location Information Acknowledgement message includes a cause of failure, **(see Fig. 2D State message 272 (e.g., ACK) & Para [0085] & [0048] lines 5-17 e.g., indications of the processing performed or not performed, partial or final results, error descriptors (e.g., cause of failure))**

(Referring to Fig. 5C, the steps for a selected task handler 155 are illustrated where in step 586 the resultant state information (e.g., completed state, partially completed state, errors and/or other indications) sent to the requesting process handler, **see Para [0106]**)

b) if the task handler 255 is able to process the service request information of the client 250, the Information Acknowledgement message includes an indication that the processing job of the client 250 has been processed successfully, **(see Para [0048] & [0085])**

(Hinni suggests new mechanisms for computing are desired, especially those which may provide a reliable computing framework and platform, **see Para [0017]**)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention for the client as disclosed in Vantinen to generate an Information

Acknowledgement message by implementing the teachings of Vanttinen who discloses when receiving the Location Information message including the location estimate of the target UE from the LCS system, the client, attempting to process the location estimate of the target UE, within the teachings of Hinni who discloses a task handler sending an information Acknowledgement message in response to the completion of a processing job requested by a client where the limitations of steps a-b are performed to inform the client of the final result of the processing, because the teaching lies in Hinni that new mechanisms for computing are desired, especially those which may provide a reliable computing framework and platform.

Regarding Claim 18, the combination of Vanttinen in view of Hinni discloses a method according to claim 17, wherein the indication that the location estimate of the target UE has been processed successfully comprises: a flag of successful handling or an absence of any processing status parameter, **(Hinni, see Para [0048])**

Regarding Claim 19, the combination of Vanttinen in view of Hinni discloses a method according to claim 17, further comprising: sending the Location Information Acknowledgement message to a LCS (location service) system, **(Hinni, see Fig. 2D & Para [0085] e.g., based on the combined teachings of Vanttinen in view of Hinni, it would be obvious to one of ordinary skill that the task handler 255 could send the state 272 to the LCS system (Fig. 4) of Vanttinen)**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADNAN BAIG whose telephone number is (571) 270-7511. The examiner can normally be reached on Mon-Fri 7:30m-5:00pm eastern Every other Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ADNAN BAIG/
Examiner, Art Unit 2461
/Huy D Vu/
Supervisory Patent Examiner, Art Unit 2461